

Faculty Attitudes and Knowledge Regarding College Students with Disabilities

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Abstract

The presence of students with disabilities (SWD) at colleges and universities in the United States has increased significantly in recent years, yet many of these students continue to encounter significant barriers that can have a profound impact on their college experience. Salient factors that contribute to the challenging climate for SWD include lack of faculty knowledge and awareness of the issues that face these students, as well as negative attitudes toward disability and the provision of accommodations. The current study examined faculty attitudes and knowledge regarding SWD via an online, anonymous survey ($n=123$). Results suggest that although faculty have generally positive attitudes toward SWD, they are more likely to hold negative attitudes toward students with mental health disabilities and learning disabilities than toward students with physical disabilities. This study also identified several misconceptions and gaps in knowledge about offices of disability services and provision of accommodations that could negatively impact students. Faculty respondents also expressed strong interest in professional development opportunities related to SWD. Implications of these findings and future directions are also addressed.

Keywords: Attitudes toward disabilities, faculty attitudes, knowledge about disabilities, students with disabilities, higher education

The presence of students with disabilities (SWD) at colleges and universities in the United States has increased significantly in recent years (Hall & Belch, 2000; Hitchings, Retish, & Horvath, 2005; Stodden, Whelley, Chang, & Harding, 2001). Despite rising enrollment, many of these students continue to encounter significant barriers that can have a profound impact on their college experience (Dowrick, Anderson, Heyer, & Acosta, 2005; Eckes & Ochoa, 2005; Madaus & Shaw, 2004; Stodden et al., 2001). One of the important factors that may contribute to the challenging climate for SWD is a lack of faculty knowledge and awareness of the issues that face these students. In addition, faculty and staff attitudes toward disability and the provision of accommodations may be particularly salient in student success (Rao, 2004). The existing literature suggests that at least some faculty members may believe that the provision of accommodations for these students may compromise the academic integrity and/or rigor of their courses/programs (Beilke, 1999).

According to data from the National Center for Education Statistics, 11.3% of undergraduate students identified as having a disability during the 2003-2004 academic year (Horn & Nevill, 2006). This included individuals with orthopedic disabilities (25.4%), mental illness/depression (21.9%), health impairments/problems (17.3%), attention deficit disorder (11.0%), specific learning disabilities (7.5%), hearing impairments (5.0%), visual impairments (3.8%), speech impairments (0.4%), and other disabilities that did not fit any of the aforementioned categories (7.8%). In 2007-2008, 10.9% of undergraduates and 7.3% of postbaccalaureate students reported having a disability (Raue & Lewis, 2011). Among undergraduate SWD, this included individuals with specific learning disabilities (31%), attention deficit disorder/attention deficit hyperactivity disorder (18%), mental illness/psychological or psychiatric conditions (15%), health impairments/conditions (11%), mobility/orthopedic impairments (7%), hearing impairments (4%), visual

impairments (3%), cognitive/intellectual disabilities (3%), autism spectrum disorders (2%), traumatic brain injuries (2%), speech/language impairments (2%), and other disabilities that did not fall into these categories (3%). This is a significant increase from data collected during the 1995-1996 academic year; at that time, six percent of undergraduate students were identified as having a disability (Horn & Berktold, 1999).

Despite the increases in enrollment, the existing literature suggests that SWD do not engage in postsecondary education at the same rate as their non-disabled peers (Horn & Nevill, 2006). The college attendance rate for SWD is less than half that of student without disabilities (Wagner, Newman, Cameto, Garza, & Levine, 2005). SWD are also less likely to enroll in four-year institutions, with the majority enrolled at two-year or community colleges (Hall & Belch, 2000, Wagner et al., 2005). Some studies have found that only one-half of SWD earn their degrees as compared to approximately two-thirds of students without disabilities who successfully complete their degrees (Hall & Belch, 2000; National Center for Education Statistics, 1999). In contrast, a longitudinal study involving 11,317 students found that students with disabilities graduated at rates similar to those without disabilities, but some participants took longer to complete their degrees as compared to their non-disabled peers (Wessel, Jones, Markle, & Westfall, 2009).

Faculty knowledge regarding accommodations is a significant barrier for SWD (Dowrick et al., 2005; Eckes & Ochoa, 2005). Without appropriate knowledge, faculty are ill-prepared to make decisions about how to effectively implement accommodations in their classrooms. The situation may be compounded for students with invisible disabilities, “as these students do not initially appear disabled and do not fit faculty members’ schemata of disability” (Barnard, Stevens, Siwatu, & Lan, 2008, p. 169). This may be particularly true for students with learning disabilities (Wolanin & Steele, 2004) or other less visible impairments (Dowrick, et al., 2005), including mental health disabilities. Faculty may also question the legitimacy of requested accommodations (Beilke, 1999; Dowrick, et al., 2005; Jensen, McCrary, Krampe, & Cooper, 2004) and send messages, either explicit or implicit, about their belief in students’ abilities.

Additionally, faculty may be concerned that the provision of accommodations compromises the academic rigor and integrity of their institution, program, or class. As faculty in one study indicated, “the issue of fairness to all students was a constant concern” (Jensen et al., 2004, p. 85). Research has supported the idea that some faculty view accommodations as providing

an unfair advantage to students with disabilities (Cook, Rumrill, & Tankersley, 2009).

In her examination of how faculty members make decisions related to accommodating students with disabilities, Bento (1996) identified that informational, ethical, and attitudinal barriers may significantly impact decision-making. Informational barriers relate to gaps in knowledge and/or lack of understanding about relevant factors for students with disabilities and/or accommodations. Ethical barriers occur when instructors make decisions about reasonable accommodations for SWD. In particular, Bento found that “ethical dilemmas emerged when the requested accommodation benefited the disabled student, but implied negative consequences for other members of the class” (p. 497). The main attitudinal barrier for faculty working with SWD was ambivalence.

On the one hand, faculty perceived disabled students as people who had to confront and overcome special challenges, which engendered feelings of respect and helpfulness towards the students. On the other hand, those feelings were also often accompanied by the perception that disabled students were somehow ‘less able’ and that their ‘disability’ could jeopardize not only their individual performance, but also limit the other students and the instructor. (Bento, 1996, p. 498)

These ethical and attitudinal barriers may be difficult for faculty to navigate, particularly if they have not had much experience working with SWD.

Additional research has reinforced that positive faculty attitudes regarding the provision of accommodations are critical to the academic success of SWD. Dowrick et al. (2005) found that negative faculty attitudes and lack of awareness were the major barriers to success for SWD. In addition, many students have reported experiences with faculty who were unwilling to provide appropriate accommodations, despite the legal requirement to do so (Kurth & Mellard, 2007).

Faculty attitudes and the academic culture are the major barriers to the successful implementation of accommodations for students with disabilities. Faculty are often ignorant about their responsibilities and about how to relate to students with disabilities. Faculty resent being told what to do by low-level administrators in the disability services offices and not being able to review or question the legitimacy of a student’s disability or the accommodation that is prescribed. (Wolanin & Steele, 2004, p. ix)

Indeed, communication between faculty and the office of disability services may be a critical factor in student success. Disability services (DS) staff are in a unique position to address misconceptions held by faculty (Jensen et al., 2004) as well as reinforce the legal obligations that instructors have with regard to the provision of accommodations for SWD. DS staff can also play a critical role in the process of student disclosure to faculty (Dowrick et al., 2005) and successful implementation of accommodations. However, caution should be exercised in this endeavor as some faculty may not be receptive to such information if they do not recognize the expertise and legitimacy of the DS staff.

Some faculty may also believe that provision of accommodations for SWD compromises academic freedom in their courses (Jensen et al., 2004; Wolanin & Steele, 2004). Though the accommodation letter presented to faculty typically outlines the accommodations requested based on a student's needs, faculty may be unaware that they are able to have input in determining how the accommodation will be implemented in their courses and therefore believe that academic freedom is disregarded in this process (Cook et al., 2009).

Faculty who receive training related to disability and/or accommodations are more likely to demonstrate positive attitudes toward SWD (Murray, Lombardi, Wren, & Keys, 2009). In particular, coursework and/or workshops focused on disability-related issues have a significant positive impact on faculty attitudes and perceptions related to SWD (Lombardi, Murray, & Gerdes, 2011; Lombardi & Murray, 2011). These findings suggest that faculty attitudes toward SWD can be improved through education, potentially lessening the barriers encountered by these students in college.

Faculty have also expressed interest in learning more about SWD and how to effectively work with these individuals. Regarding students with mental health disabilities, faculty reported that their current levels of knowledge and training were not adequate, and expressed a desire for more resources for working with these students (Brockelman et al., 2006). Another study found that faculty believed that having more information about students with learning disabilities would assist them in providing appropriate accommodations (Murray, Wren, & Keys, 2008).

However, it should be noted that attitudinal change does not necessarily lead to action, even for faculty who endorse inclusive practices for SWD (Cook et al., 2009; Lombardi, Murray, & Gerdes, 2011). In addition, these professional development opportunities are often offered on a voluntary basis. Faculty who choose to attend may already be more informed about

working with SWD and sensitive to the needs to these students. One of the biggest challenges is increasing attendance for those faculty who could most benefit from additional training.

The purpose of the current study was to examine faculty attitudes and knowledge regarding college students with various types of disabilities at a mid-sized, public liberal arts university in upstate New York. This study was exploratory in nature and data were collected at only one institution. Three main research questions guided this study: (1) What are faculty members' current attitudes toward SWD? (2) What level of knowledge do faculty have regarding SWD and service provision? and (3) Are faculty interested in professional development opportunities related to SWD? This study also sought to address a gap in the literature as, to the researchers' knowledge, no study to date has examined the differences in faculty attitudes toward SWD based on type of disability.

Methodology

Participants

The survey was distributed via a faculty listserv to all full-time and part-time faculty at a mid-sized, public liberal arts university in upstate New York. The university has a total enrollment of approximately 8,000 students, the majority of whom (approximately 7,000) are undergraduates. Of the 604 full- and part-time faculty members, 123 (20.4%) completed the study. Of these, 78 were female (63.4%), 44 (35.8%) were male, and one (0.8%) did not report gender. The majority of respondents were full-time faculty members (68.3%; $n=84$), and 30.9% ($n=38$) were part-time. The response rate for full-time faculty was 25.7% (84 out of 327 reporting). For part-time faculty, the response rate was 13.7% (38 out of 277).

Procedures

Data were collected via an online, anonymous survey administered via the course management system (Angel). Faculty were recruited through an email distributed by the director of the teaching and learning center via listserv. An initial reminder email was sent two weeks after initial contact to encourage participation. A second and final reminder email was sent via the listserv two weeks after the first reminder. No incentives were offered for participation.

Instrument

The survey instrument was adapted from a faculty survey created at the University of Oregon (2009) to collect internal data regarding faculty attitudes towards

disability and knowledge about disability services. The instrument was identified by the DS director at the institution where data were collected through a professional connection. To the researchers' knowledge, neither the original instrument nor the data were shared externally. No information on the psychometric properties of the original survey was made available.

A subset of questions from the original instrument was used to explore pertinent factors identified in the literature (e.g., professional development) and factors that would assist the DS office (e.g., faculty knowledge of fire evacuation procedures for SWD). Items were also modified to reflect the characteristics of the institution where data were collected (institution name was changed and items were modified to accurately reflect institutional characteristics, such as available services). Some items were eliminated as they were not applicable to the areas of focus in this study and to minimize participant response fatigue. The original survey was also modified to explore the differences in faculty attitudes based on three disability types (physical, learning, or mental health), rather than inquiring about disability in general. These categories were selected because they represent three of the most prevalent types of disabilities that faculty may encounter.

The final instrument consisted of four demographic items as well as 30 items to assess faculty attitudes and knowledge regarding students with disabilities (a copy of the instrument is provided in Appendix A). The items explored a variety of areas including: faculty beliefs about the potential for students with three types of disabilities (physical, learning, mental health) to be successful and/or compete at the college level, faculty knowledge regarding postsecondary participation for SWD, faculty knowledge about available resources for such students, and faculty attitudes toward the provision of accommodations in higher education. In addition, the survey asked participants about their knowledge of services provided by the DS office and their interest in on-campus trainings related to working with SWD.

Results

Attitudes Toward SWD

Results suggest that, in general, faculty have positive attitudes toward college SWD and believe that these students can be both successful and competitive in higher education. The vast majority of respondents (96.7%; $n=119$) reported that they "agree" or "strongly agree" that students with physical disabilities can be successful at the college level. For students with learning disabilities and mental health disabilities, endorsement of these two response categories was 90.2% ($n=112$) and 82.9% ($n=102$), respectively.

One-way Analysis of Variance (ANOVA) was used to analyze faculty responses to survey items pertaining to their attitudes toward SWD. Respondents were asked about their belief in students' ability to be successful and to compete academically based on disability type (learning disabilities, physical disabilities, and mental health disabilities). These items utilized a five-point Likert scale, with response options ranging from "strongly agree" to "strongly disagree." Two cases were excluded from this analysis due to missing data ($n=121$ for this analysis). The internal reliability of these items (Cronbach's Alpha) was 0.859. Results revealed statistically significant differences in faculty attitudes using disability type as the grouping variable. Significant differences were found in faculty beliefs about students' ability to be successful in college based on disability type, $F(2, 359) = 19.067, p < .001$ (see Table 1), as well as beliefs about students' ability to compete academically in college, $F(2, 359) = 22.665, p < .001$ (see Table 2). The effect size for both ANOVA analyses was relatively small ($d = 0.164$).

Post-Hoc Analysis (Tukey's HSD) delineated the differences in faculty responses based on disability type. When examining faculty beliefs about SWD's ability to be successful, all three disability categories were significantly different from one another, with the most positive attitudes demonstrated toward students with physical disabilities, the second most positive toward students with learning disabilities, and the least positive toward students with mental health disabilities. It should be noted that although the difference in attitudes towards students with learning disabilities was significantly higher than those reported for mental health disabilities, the difference was much smaller ($p = .039$) between these two groups than when comparing each to physical disabilities ($p = .001$ for learning and $p < .001$ for mental health). When examining faculty beliefs about students' ability to compete academically in college, ratings for those with physical disabilities were significantly higher than both learning disabilities ($p < .001$) and mental health disabilities ($p < .001$); however, the latter two groups were not significantly different from each other ($p = .488$). For detailed results, see Table 3.

Faculty were also asked about their attitudes toward the provision of accommodations for SWD. Results suggest that some faculty hold negative attitudes toward the provision of accommodations, with 4.9% ($n=6$) of respondents reporting that they agreed or strongly agreed with the ideas that provision of accommodations compromises academic integrity and gives an unfair

Table 1

Analysis of Variance for Ability to be Successful in College by Disability Type

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|--------|------|
| Between Groups | 15.855 | 2 | 7.927 | 19.067 | .000 |
| Within Groups | 149.261 | 359 | .416 | | |
| Total | 165.116 | 361 | | | |

Table 2

Analysis of Variance for Ability to Compete Academically in College by Disability Type

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------------|----------------|-----|-------------|--------|------|
| Between Groups | 21.682 | 2 | 10.841 | 22.665 | .000 |
| Within Groups | 171.713 | 359 | .478 | | |
| Total | 193.395 | 361 | | | |

advantage over other students. Though this is a small proportion of respondents, it is important to recognize that these beliefs still exist among faculty and need to be addressed to improve the experience for SWD.

Attitudinal differences based on faculty employment status (full-time vs. part-time) were not examined in this exploratory study as this was not a main focus of the research. Though this information was collected to examine the demographic characteristics of respondents, the analysis plan did not include examination of how employment status relates to faculty attitudes regarding SWD. In addition, due to the limited number of participants (84 full-time faculty members and 38 part-time faculty members), there was not sufficient power to explore this difference.

Knowledge Regarding SWD

Respondents demonstrated a lack of knowledge regarding policies and procedures for SWD. When presented with the statement, "I am aware of evacuation procedures for students with disabilities in the event of a fire or fire drill," 43.1% ($n=43$) disagreed and 9.8% ($n=12$) strongly disagreed. Participants also reported some uncertainty regarding the Americans with Disabilities Act as it applies to SWD (11.4%

not familiar; 27.6% unsure). In addition, faculty in this study expressed a lack of knowledge/uncertainty regarding the college attendance rates for SWD disabilities compared to non-disabled peers. Only 35% ($n=43$) of participants correctly identified that students with disabilities do not attend postsecondary institutions at the same rate as their non-disabled peers. The majority, 60.2% (74), were unsure and 4.1% ($n=5$) reported that the rates were equal.

Despite this reported lack of knowledge regarding policies and procedures related to SWD, faculty reported strong beliefs that they are sensitive to the needs to SWD and know where to find support on campus when working with SWD. This area was assessed with the item, "I am sensitive to the needs of students with _____ disabilities," presented three times to distinguish beliefs based on disability type. An overwhelming 97.6% selected "strongly agree" or "agree" in reference to students with physical disabilities. Similar results were found for learning disabilities and mental health disabilities, with 94.3% and 88.6% respectively who indicated agreement or strong agreement. In addition, participants expressed confidence in their ability to find additional on-campus support related to working with SWD, with 52.8% ($n=65$)

Table 3

Tukey HSD Post Hoc Analysis of ANOVA Results

| Dependent Variable | Disability Type (A) | Disability Type (B) | Mean Difference (A-B) | Standard Error | Significance | 95% Confidence Interval | |
|-------------------------------------|---------------------|---------------------|-----------------------|----------------|--------------|-------------------------|-------------|
| | | | | | | Lower Bound | Upper Bound |
| Ability to be Successful in College | Learning | Physical | .306** | .083 | .001 | .11 | .50 |
| | | Mental Health | -.204* | .083 | .039 | -.40 | -.01 |
| | | Physical | -.306** | .083 | .001 | -.50 | -.11 |
| | | Mental Health | -.509** | .083 | .000 | -.70 | -.31 |
| | Mental Health | Physical | .204* | .083 | .039 | .01 | .40 |
| | | Learning | .509** | .083 | .000 | .31 | .70 |
| | Physical | Physical | .460** | .089 | .000 | .25 | .67 |
| | | Mental Health | -.102 | .089 | .488 | -.31 | .11 |
| | | Physical | -.460** | .089 | .000 | -.67 | -.25 |
| | | Mental Health | -.562** | .089 | .000 | -.77 | -.35 |
| | Mental Health | Physical | .102 | .089 | .488 | -.11 | .31 |
| | | Learning | .562** | .089 | .000 | .35 | .77 |

Note. * $p < .05$; ** $p < .01$

disagreeing and 19.5% strongly disagreeing with the statement, “When students with disabilities are having difficulties, I am uncertain about where I can find additional support on campus.”

Findings from this study also revealed that there are some gaps in faculty knowledge regarding the services that the DS office on campus provides. Faculty expressed uncertainty regarding qualification for accommodations. One survey item stated that students would not receive support services unless they disclosed their disability status. Almost half (49.6%; $n=61$) correctly identified that this was true; however, a large proportion indicated uncertainty (38.2%; $n=47$), and 12.2% ($n=15$) erroneously indicated that the statement was false.

Several misconceptions were noted related to knowledge of services provided for SWD by the DS office. Over half of respondents (54.5% ; $n=67$)

endorsed a belief that the office provides psychological and educational testing, which is not the case on the campus where data were collected. Similarly, 46.3% ($n=57$) reported an erroneous belief that the office provides transportation services for students with mobility impairments. A summary of the results from this portion of the survey is provided in Table 4. These findings suggest that faculty could benefit from additional information and training regarding accommodations for students with disabilities and the role of DS offices.

Respondents were also asked if they had ever advised a student to change his/her major due to limitations associated with disability. Fifteen (12.2%) participants reported that they had engaged in this behavior. Those who responded affirmatively were asked to provide additional detail describing this process.

Table 4

Faculty Knowledge of Services Offered by the Disability Services (DS) Office

| Service | Yes | No |
|--|--------------|--------------|
| Transportation Services for Students with Mobility Impairments | 46.3% | 53.7% |
| Books in Alternate Format | 68.3% | 31.7% |
| Note Takers | 88.6% | 11.4% |
| Psychological / Educational Testing | 54.5% | 45.5% |
| Wheelchair Services | 38.2% | 61.2% |
| Assistance for Students with Temporary Disabilities | 64.2% | 35.8% |
| Escorts to and from Class | 35.8% | 64.2% |
| Dictation Software | 62.6% | 37.4% |
| Testing Accommodations | 97.6% | 2.4% |

Note. Bold text indicates correct responses.

Responses included:

I once had a blind and deaf student who was unable to grasp the material sufficiently to perform in the workplace.

I've had students with mental health issues who would not be successful in schools with multiple demands and students who challenge them.

A student in a wheelchair wanted to be in production in the TV studio. They were physically unable of operating [sic] the studio camera.

Students with disabilities are treated the same as students without disabilities. If they demonstrate by performance that they are not suited academically or physically for a certain field of study for whatever reason, I try to advise them into a more appropriate field.

While some of these responses seem reasonable, it is important to note that directly informing a student that s/he cannot complete a particular major based on disability status is discriminatory and illegal (Wolanin & Steele, 2004). However, the student must be able to perform the essential duties of the major/career with or without accommodations. “Accommodations which are a ‘fundamental alteration’ of a program or which would impose an ‘undue’ financial or administrative burden are not required” (p. viii).

Respondents also expressed strong interest in professional development opportunities related to working with SWD. Participants indicated that they would be interested in attending workshops on the following topics: Universal Design (UD) in course development (27.6%); Access issues related to technology in the classroom (30.9%); Accommodations 101 (38.2%); Disability Dos and Don'ts (48%); Best practices in working with students who are blind/visually impaired (27.6%); Best practices in working with students who are deaf/hard of hearing (30.9%); Best practices in working with students with autism spectrum disorders

(40.7%); Best practices in working with students with learning disabilities (48%), Best practices in working with students with physical disabilities (33.3%); and Best practices in working with students with mental health disabilities (56.1%).

Discussion

In this study, faculty reported the most positive attitudes for students with physical disabilities and the most negative attitudes for students with mental health disabilities. When examining beliefs about SWD's ability to be successful in college, respondents reported significantly more favorable attitudes toward students with physical disabilities, followed by learning disabilities, and then mental health disabilities. For SWD's ability to be academically competitive in college, respondents again reported the most positive attitudes toward students with physical disabilities, followed by learning disabilities and mental health disabilities, which were not significantly different from each other. The results of this study suggest that students with learning or mental health disabilities may encounter significantly more attitudinal barriers than those with physical disabilities. Though the effect size for these analyses was relatively small ($d = 0.164$), the findings are worth noting as they suggest that attitudes toward SWD and resulting interpersonal interactions may differ based on disability type. Thus, these students may need additional support from the DS office in coping with negative attitudes that they may encounter when interacting with faculty.

Further, results suggest that at least a small proportion of faculty continue to demonstrate negative attitudes towards SWD and the provision of accommodations. This finding is consistent with existing research (Cook et al. 2009; Dowrick et al., 2005; Kurth & Mellard, 2007; Wolanin & Steele, 2004), and also represents an opportunity for improvement for institutions of higher education. Addressing faculty misconceptions about SWD and/or accommodations has the potential to significantly improve their college experience.

These results suggest that faculty hold the most negative attitudes toward students with mental health disabilities. This finding is particularly interesting due to the wide variety of mental health symptomology and individual functioning. What comes to mind when faculty hear the term "mental health disability"? Do their thoughts lean toward more severe diagnoses such as schizophrenia? Or, do they instead think of substance abuse, personality disorders, depression, and anxiety disorders, the four most commonly diagnosed mental health disorders in college students (Blanco et al., 2008)?

Further exploration of this bias is certainly warranted.

Results also demonstrate that some faculty are under-aware of policies and procedures relevant for SWD as well as on-campus support services available. Faculty expressed uncertainty regarding the Americans with Disabilities Act as it applies to college students and also demonstrated some misconceptions regarding the specific services offered by the DS office on campus. Previous studies have found similar results (Dowrick et al., 2005). Results from this study suggest that faculty could benefit from additional education focused on legal requirements when working with SWD as well as on-campus support services available to assist in this endeavor.

A disconcerting finding in the present study is that so few faculty reported awareness of procedures for SWD in the event of a fire or fire drill (43.1% disagreed and 9.8% strongly disagreed that they were informed of such procedures). Since faculty are typically expected to take a leadership role in this type of emergency situation, it is concerning that over half in this study reported a lack of knowledge of how to proceed. Further, it raises the possibility of the institution being held liable if faculty act in a manner that causes a student harm and does not align with established policy.

The findings from this study further suggest that faculty could benefit from workshops and other training opportunities for enhancing their work with SWD, particularly those with mental health disabilities. Almost half (47.2%) expressed interest in professional development sessions and 63.4% reported interest in attending a panel presentation where students with disabilities would share personal information about their experiences in college. These results suggest that participation in such offerings would be robust. In particular, respondents expressed strong interest in attending workshops focused on best practices in working with students with mental health disabilities, best practices in working with students with learning disabilities, and Disability Dos and Don'ts. Previous research (Lombardi, Murray, & Gerdes, 2011; Lombardi & Murray, 2011) has also provided evidence that faculty training has a significant impact on attitudes toward and perceptions of SWD and that faculty have interest in learning how to work more effectively with SWD (Brockelman et al., 2006; Murray et al., 2008). With administrative support, DS offices could assist in planning and implementing such training opportunities for interested faculty. This would also allow an opportunity to address misconceptions that faculty have about working with SWD and providing accommodations in the classroom. Postsecondary institutions might also consider implementing more

comprehensive training for new faculty, perhaps as part of their orientation program. This proactive approach would better equip faculty for working with SWD and may have significant implications for improving the college experience for SWD. While DS professionals could play a significant role in advocating for and planning such opportunities, it is imperative to note that without administrative support, implementation will be challenging, particularly in getting faculty to take advantage of these offerings. Often the faculty who participate are those who already have an interest in improving their work with SWD; however, it cannot be assumed that all faculty see this as a priority.

One item to consider is who should facilitate such workshops. The literature suggest that faculty may not be as open to information that originates from the DS office (Wolanin & Steele, 2004). Perhaps peer-led training would be a better option. Collaboration between the DS office and faculty with interest in disability-related issues may be beneficial in facilitating this process. Another approach is to include disability as an aspect of diversity training and related activities. Faculty members could be made aware that "they are not simply fulfilling some legislative mandate but embracing and fostering diversity on their campuses" (Barnard et al., 2008, p. 174). In this way, becoming more informed about disability-related issues may be viewed by faculty as a means of making the institution more inclusive for all students, not just those with disabilities. Postsecondary institutions might also consider developing a library of resources to assist faculty in their work with SWD and/or to develop a peer mentorship program where faculty who have significant experience with SWD can assist those with less experience (Lynch & Gussel, 1996).

Limitations

Caution should be used in generalizing these results. Additional research is needed to ascertain whether these findings are consistent across faculty at a variety of institutions, as they may only be representative of the beliefs and attitudes found at this particular institution. This study was also limited by the size of the sample; additional data are needed to ascertain whether these results are consistent across faculty with diverse characteristics.

In addition, this study is limited by the fact that participants may have felt pressure to respond to items in socially desirable ways. It is highly likely that faculty may have at least some notion that providing accommodations to SWD is a legal requirement, and consequently may have been hesitant to express beliefs in contrast to that mandate.

Future Directions

Future studies in this area should seek to draw a larger pool of diverse participants. Since the results presented here reflect only the attitudes and knowledge of faculty at one institution, it would be helpful to see if there are different responses patterns at different types of institutions (e.g., public vs. private, two-year vs. four-year) and whether faculty knowledge and attitudes related to SWD vary by geographic location. It is also possible that certain majors/fields of study pose particular challenges for SWD and the faculty who work with these students. Attitudinal differences based on faculty employment status (full-time vs. part-time) and departmental/college affiliation were not examined in this exploratory study, and analysis of how these demographic characteristics relate to faculty attitudes and knowledge regarding SWD would be an interesting avenue for future research.

In addition, future research should continue to examine attitudinal differences based on disability type. The present study employed three general disability categories: physical, learning, and mental health. However, there may be important distinctions in faculty attitudes and/or knowledge related to working with students with specific types of disabilities; for example, for students with mobility impairments as compared to those with sensory disabilities. Further delineation of disability categories may yield valuable insights regarding how faculty perceive and interact with students with a variety of disabilities.

A third promising area for future inquiry centers on the most effective ways to address faculty attitudes toward SWD. Previous research has suggested that workshops and other training opportunities can be effective methods of change (Murray, et al., 2009; Lombardi, et al., 2011); yet, getting faculty to take advantage of these offerings can be quite challenging. Moreover, future research can examine whether faculty training has an impact on actions toward SWD or whether the change is limited to attitude.

With a broader and deeper understanding of faculty attitudes and knowledge regarding SWD, DS staff can better address gaps in knowledge and/or problematic attitudes that faculty hold. One way that this may be accomplished is through the design and delivery of workshops and trainings to address issues that will lead to an improved academic experience for SWD. With sufficient knowledge, faculty can make comprehensive, informed efforts to implement appropriate accommodations and remove barriers to success. SWD deserve no less.

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Appendix

Faculty Attitudes and Knowledge Regarding College Students with Disabilities (SWD) Survey

1. Gender:
 - a. Female
 - b. Male
2. Department:
3. Total number of years in academia: _____
4. My position at _____ is (check one):
 - a. Full-time
 - b. Part-time
5. I believe that...
 - a. Students with learning disabilities can be successful at the college level
 - i. Strongly agree
 - ii. Agree
 - iii. Neither agree nor disagree
 - iv. Disagree
 - v. Strongly disagree
 - b. Students with physical disabilities can be successful at the college level
 - i. Strongly agree
 - ii. Agree
 - iii. Neither agree nor disagree
 - iv. Disagree
 - v. Strongly disagree
 - c. Students with mental health disabilities can be successful at the college level
 - i. Strongly agree
 - ii. Agree
 - iii. Neither agree nor disagree
 - iv. Disagree
 - v. Strongly disagree
6. I believe that...
 - a. Students with learning disabilities are able to compete academically at the college level
 - i. Strongly agree
 - ii. Agree
 - iii. Neither agree nor disagree
 - iv. Disagree
 - v. Strongly disagree
 - b. Students with physical disabilities are able to compete academically at the college level
 - i. Strongly agree
 - ii. Agree
 - iii. Neither agree nor disagree
 - iv. Disagree
 - v. Strongly disagree
 - c. Students with mental health disabilities are able to compete academically at the college level
 - i. Strongly agree
 - ii. Agree
 - iii. Neither agree nor disagree
 - iv. Disagree
 - v. Strongly disagree

7. Student with disabilities are reluctant to disclose their disability to me.
 - a. Strongly agree
 - b. Agree
 - c. Neither agree nor disagree
 - d. Disagree
 - e. Strongly disagree
8. I would like more information about the needs of...
 - a. Students with learning disabilities at
 - i. Strongly agree
 - ii. Agree
 - iii. Neither agree nor disagree
 - iv. Disagree
 - v. Strongly disagree
 - b. Students with physical disabilities at
 - i. Strongly agree
 - ii. Agree
 - iii. Neither agree nor disagree
 - iv. Disagree
 - v. Strongly disagree
 - c. Students with mental health disabilities at
 - i. Strongly agree
 - ii. Agree
 - iii. Neither agree nor disagree
 - iv. Disagree
 - v. Strongly disagree
9. I am sensitive to the needs of...
 - a. Students with learning disabilities
 - i. Strongly agree
 - ii. Agree
 - iii. Neither agree nor disagree
 - iv. Disagree
 - v. Strongly disagree
 - b. Students with physical disabilities
 - i. Strongly agree
 - ii. Agree
 - iii. Neither agree nor disagree
 - iv. Disagree
 - v. Strongly disagree
 - c. Students with mental health disabilities
 - i. Strongly agree
 - ii. Agree
 - iii. Neither agree nor disagree
 - iv. Disagree
 - v. Strongly disagree
10. Students with disabilities attend postsecondary schools at rates proportionate to the rates of postsecondary attendance among students who do not have disabilities.
 - a. Yes
 - b. No
 - c. Unsure
11. I am familiar with the Office for Students with Disabilities (OSD) at
 - a. Yes
 - b. No
 - c. Unsure

12. To your knowledge, which of the following resources are available for registered OSD students? Check all that apply.

- a. Transportation for students with mobility impairments
- b. Books in alternate formats
- c. Note takers
- d. Psychological/educational testing
- e. Wheelchair services
- f. Assistance for students with temporary impairments
- g. Escorts to and from classes
- h. Dictation software
- i. Testing accommodations (e.g., extended time, distraction-free testing location)

13. I think it would be appropriate to allow a student with a documented disability to substitute an alternative course for a required course if the substitution did not dramatically alter the program requirements.

- a. Strongly agree
- b. Agree
- c. Neither agree nor disagree
- d. Disagree
- e. Strongly disagree

14. I am willing to spend extra time meeting with students with documented disabilities to provide them with additional assistance as needed.

- a. Strongly agree
- b. Agree
- c. Neither agree nor disagree
- d. Disagree
- e. Strongly disagree

15. I make appropriate individual accommodations for students who have presented a letter of accommodation from OSD.

- a. Strongly agree
- b. Agree
- c. Neither agree nor disagree
- d. Disagree
- e. Strongly disagree

16. I make appropriate individual accommodations for students who have disclosed their disability to me but have not presented a letter of accommodation from OSD.

- a. Strongly agree
- b. Agree
- c. Neither agree nor disagree
- d. Disagree
- e. Strongly disagree

17. Students with disabilities will not receive support services at _____ unless they disclose their disability.

- a. True
- b. False
- c. Unsure

18. Have you ever had to advise a student to change his/her major due to limitations associated with his/her disability? – Yes/No

- a. If yes, please describe this process: _____

19. When students with disabilities are having difficulties, I am uncertain about where I can find additional support on this campus.

- a. Strongly agree
- b. Agree
- c. Neither agree nor disagree
- d. Disagree
- e. Strongly disagree

20. Given time constraints and other job demands, it is unrealistic for me to make reasonable accommodations for students with...

- a. Learning disabilities
 - i. Strongly agree
 - ii. Agree
 - iii. Neither agree nor disagree
 - iv. Disagree
 - v. Strongly disagree
- b. Physical disabilities
 - i. Strongly agree
 - ii. Agree
 - iii. Neither agree nor disagree
 - iv. Disagree
 - v. Strongly disagree
- c. Mental health disabilities
 - i. Strongly agree
 - ii. Agree
 - iii. Neither agree nor disagree
 - iv. Disagree
 - v. Strongly disagree

21. Currently, in my role, I do not have sufficient knowledge to make adequate accommodations for students with disabilities.

- a. Strongly agree
- b. Agree
- c. Neither agree nor disagree
- d. Disagree
- e. Strongly disagree

22. I receive adequate support from my department/program/unit in working with students who have documented disabilities.

- a. Strongly agree
- b. Agree
- c. Neither agree nor disagree
- d. Disagree
- e. Strongly disagree

23. _____ has an easily accessible collection of reference materials about students with disabilities.

- a. Strongly agree
- b. Agree
- c. Neither agree nor disagree
- d. Disagree
- e. Strongly disagree

24. I am willing to help a student with a disability to navigate the various college processes and procedures.

- a. Strongly agree
- b. Agree
- c. Neither agree nor disagree
- d. Disagree
- e. Strongly disagree

25. I am willing to be an advocate for a student with a disability and help him or her secure needed accommodations.

- a. Strongly agree
- b. Agree
- c. Neither agree nor disagree
- d. Disagree
- e. Strongly disagree

26. The _____ campus is accessible for students with disabilities.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

27. In my discipline, providing accommodations to students with disabilities:

- Compromises academic integrity
 - Strongly agree
 - Agree
 - Neither agree nor disagree
 - Disagree
 - Strongly disagree
- Gives an unfair advantage over other students
 - Strongly agree
 - Agree
 - Neither agree nor disagree
 - Disagree
 - Strongly disagree

28. I am aware of evacuation procedures for students with physical disabilities in the event of a fire or fire drill.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

29. How many professional full-time staff are employed in the Office for Students with Disabilities?

- Write in a number: _____

30. I would be interested in attending professional development sessions related to the needs of students with disabilities.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

31. I would be interested in attending a panel presentation where students with disabilities share personal information about their disabilities and their experiences in college.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

32. Of the following professional development opportunities, which would you be likely to attend? Check all that apply.

- Universal Design (UD) in course development
- Access issues related to technology in the classroom
- OSD Accommodations 101
- Disability Dos and Don'ts
- Best practices in working with students who are blind/visually impaired
- Best practices in working with students who are deaf/hard of hearing
- Best practices in working with students with autistic spectrum disorders
- Best practices in working with students with learning disabilities
- Best practices in working with students with physical disabilities
- Best practices in working with students with mental health disabilities
- Other (please explain): _____

33. I am familiar with the Americans with Disabilities Act (ADA) as it applies to students with disabilities in college.

- Yes
- No
- Unsure

34. As a faculty member, what do you want or need to know about students with disabilities that is not already provided/offered?

- Fill in: _____